

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-7, 9, 10, 12-15, 17, and 18 are currently pending. Claims 1, 9, 10, 12, 17, and 18 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 1-7, 9, 10, 12-15, 17, and 18 were rejected under 35 U.S.C. § 112, second paragraph, regarding the change of electromagnetic field strength; Claims 1, 5, 9, 10, 12, 17, and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,378,887 to Kobayashi (hereinafter “the ‘887 patent”); Claims 2, 3, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘887 patent in view of U.S. Patent Application Publication No. 2002/0188852 to Masaki et al. (hereinafter “the ‘852 application”); Claims 6, 7, 13, and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘887 patent, further in view of U.S. Patent No. 6,351,845 to Hinker et al. (hereinafter “the ‘845 patent”); and Claim 4 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form and the rejection under 35 U.S.C. § 112, second paragraph, is overcome.

Applicant respectfully submits that the rejections of the claims under 35 U.S.C. § 112, second paragraph, are rendered moot by the present amendment to the claims. Claim 1 has been amended to clarify that the external access results from a change of electromagnetic field strength detected by the antenna. Moreover, Claim 10 has been amended to delete any reference to the word “independent.” Accordingly, Applicant respectfully submits that the rejections under 35 U.S.C. § 112 are rendered moot by the present amendment to the independent claims.

Amended Claim 1 is directed to an information processing apparatus having embedded therein a non-contact type integrated circuit (IC), the information processing apparatus comprising: (1) a communicating unit configured to communicate data with the non-contact type IC via data lines of the information processing apparatus that are external to, but connect to, the non-contact type IC, the non-contact type IC including a memory, a memory control unit, and an antenna; (2) detecting means for detecting any access to the non-contact type IC, the detecting means being external to the non-contact type IC; (3) determining means for determining whether a result of detection by the detecting means indicates (a) internal access by the communicating unit of the information processing apparatus via the data lines, or (b) external access from an external apparatus via the antenna, the external access resulting from a change of electromagnetic field strength detected by the antenna; and (4) access controlling means for controlling the external access to the non-contact type IC from the external apparatus via the antenna when the determining means determines that the result of detection by the detecting means indicates the external access from the external apparatus via the antenna, and for enabling the internal access to the non-contact IC by the communicating unit of the information processing apparatus via the data lines when the determining means determines that the result of detection by the detecting means indicates internal access by the communicating unit. Further, Claim 1 clarifies that the memory, memory control unit, and antenna of the non-contact type IC are separate and distinct elements from the communicating unit, the detecting means, the determining means, and the access controlling means of the information processing apparatus. The changes to Claim 1 are supported by the originally filed specification and do not add new matter.¹

¹ See, e.g., Figure 2 and the discussion related thereto in the specification.

Applicant respectfully submits that the rejection of Claim 1 as anticipated by the '887 patent has been rendered moot by the present amendment to Claim 1 or is otherwise traversed.

The '887 patent is directed to a non-contact type IC card that communicates signals with an external device in a non-contact manner, including a main circuit 16 that conducts various operations based on functions of the IC card, a circuit for setting time for inhibition of re-access 12, which creates a signal to inhibit operation of the main circuit 16 for a predetermined period of time, and a control means for controlling the main circuit. Further, the '887 patent discloses that the main circuit 16 is inhibited for a predetermined period of time after the operation of the main circuit is completed to prevent a double-write operation of history in the IC card due to re-access in a short period of time following an initial access.

As shown in Figure 1, the '887 patent discloses that the non-contact type IC card includes a power source circuit 10, a circuit setting time for re-accessing inhibition 12, a control circuit 14, and a main circuit 16. Further, these elements of the '887 non-contact type IC are shown in more detail in Figures 2 and 5. In particular, the main circuit 16 is shown in Figure 5 to include a memory 32, a memory control section 36, a read area deciding section 34, and a modulating and demodulating section 38.

The '887 patent discloses that the read area deciding section 34 determines from which one of the two areas 321 and 322 of the memory data is to be read from. Further, the '887 patent discloses that the memory control section 36 controls writing to and reading from the memory 32, wherein the memory control section 36 writes to or reads from either area 321 or area 322 based on information provided by the read area deciding section 34. See Figure 10 and the discussion related thereto in the '887 patent. Thus, the purpose of the '887 patent non-contact type IC card, shown in part in Figure 5, is to prevent erroneous history

information from being written into the memory 32 when a user of the card enters an area accessible to a reader/writer two or more times in quick succession.

In the outstanding Office Action, the Office interprets the claimed information processing apparatus (having embedded therein a non-contact type IC) as comprising elements 10, 12, and 14, as well as the memory control section 36 within the main circuit 16. Further, the Office Action asserts that the claimed non-contact IC is comprised only of elements 32, 34, and 38 of the non-contact type IC card disclosed by the '887 patent, but not the other elements disclosed to be part of the '887 non-contact IC. Thus, despite the fact that the '887 patent discloses a "non-contact type IC" that includes all elements in 10, 12, 14, and 16 shown in Figure 2 of the '887 patent, and the present application discloses and claims a "non-contact type IC", the Office Action has chosen to pick only three of the elements of the "non-contact type IC" disclosed by the '887 patent to read on the claimed "non-contact type IC."

In this regard, Applicant notes that M.P.E.P. § 2111 states that claims must be given the broadest reasonable interpretation consistent with the specification and that the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. The M.P.E.P. states that in the *In re Cortright* case,² the court held that a term in the claims of that case was to be interpreted consistent with applicant's disclosure and the disclosure of other patents from the analogous art using the same phrase. In this regard, Applicant notes that the '887 patent and Applicant's claims both refer to a "non-contact type IC" card and that one of ordinary skill in the art, in light of Applicant's specification, would interpret that term consistently with the non-contact type IC card disclosed by the '887 patent. Thus, Applicant respectfully submits that it is **unreasonable** to interpret some of the '887 elements disclosed as belonging to a non-contact

² 165 F.3d 1353 (Fed. Cir. 1999).

IC card, and to interpret other '887 elements that are disclosed to be within the '887 non-contact type IC card and directly connected to three other elements in the non-contact type IC card, to be external to the non-contact type IC card. Applicant respectfully submits that such an interpretation is unreasonable and not consistent with the interpretation that one of ordinary skill in the art would give to a non-contact IC.

Further, Applicant notes that the last line on page 4 of the outstanding Office Action states that the read area deciding section 34 is to be read on the communicating unit of the claimed information processing apparatus recited in Claim 1.³ However, Applicant notes that the read area deciding section 34 has already been indicated to read on the claimed memory control unit, which is part of the claimed non-contact type IC.⁴ **However, Applicant respectfully submits that the '887 read area deciding section 34 cannot be both part of the claimed non-contact type IC and part of the claimed information processing apparatus, wherein Claim 1 clearly states that the memory control unit of the non-contact type IC is a separate and distinct element from the communicating unit of the information processing apparatus.**

Further, Applicant notes that the internal access recited in Claim 1 is access by the communicating unit of the information processing apparatus via data lines of the information processing apparatus that are external to, but connect to, the non-contact type IC. Thus, the internal access recited in Claim 1 does not mean internal access by an element within the non-contact type IC card, but necessarily means internal access by the communicating unit of the information processing apparatus, as opposed to external access from an external apparatus via the antenna. On the contrary, the Office Action appears to be interpreting an

³ Applicant notes that Claim 1 has been amended to recite a communicating unit configured to communicate data with the non-contact type IC unit data lines.

⁴ See Office Action, page 4, fourth line from the bottom.

internal access as reading and writing to the memory 32 by the read area deciding section 34, this access being “internal” to access to the IC.

Further, Applicant respectfully submits that the ‘887 patent fails to disclose access controlling means for controlling the external access to the non-contact type IC from the external apparatus via the antenna when the determining means determines that the result of detection by the detecting means indicates the external access from the external apparatus via the antenna, and for enabling the internal access to the non-contact IC by the communicating unit of the information processing apparatus via the data lines, when the determining means determines that the result of the detection by the detecting means indicates internal access by the communicating unit, as recited in amended Claim 1. The ‘887 patent does not teach or suggest **two** ways of accessing the non-contact IC (an internal access from the communicating unit of the information processing apparatus by a data line and an external access via an antenna) and an access controlling means that controls both ways of accessing the IC. Rather, the ‘887 patent merely discloses a non-contact IC that is accessed by an antenna. In an attempt to remedy the inherent deficiencies of the ‘887 patent, which is only directed to a non-contact IC, the Office Action attempts to isolate one element (memory control section 36) of the non-contact IC card disclosed by the ‘887 patent and to interpret this element as each of the claimed detecting means, the determining means, and the access controlling means recited in Claim 1. However, as discussed above, Applicant respectfully submits that it is unreasonable to interpret the memory control section 36 as anything other than an element of the ‘887 non-contact IC card.

Moreover, as discussed above, the ‘887 patent does not disclose the communicating unit that is configured to communicate data with the non-contact type IC via data lines of the information processing apparatus that are external to, but connect to, the non-contact type IC, as recited in Claim 1. The read area deciding section 34 is asserted by the Office Action to be

part of the non-contact IC, and thus cannot be an element of the information processing apparatus, as required by Claim 1.

Further, Applicant notes that the Office Action insists on asserting that "... the memory control section is capable of making a determination of where the access is coming from – more specifically, the read area deciding section is used to decide which area the memory 32 should be accessed." However, Applicant notes that the read area deciding section is only involved in the writing and reading of information to the memory 32. Applicant respectfully submits that the '887 patent does not disclose that the memory control section 36 makes a determination of whether the access is internal (from the information processing apparatus) via the data lines or external to the IC via the antenna. While the memory control section 36 is involved in having information written to and read from the memory 32, the '887 patent does not disclose that the memory control section 36 makes the determination recited in Claim 1. Even assuming arguendo that both types of access are disclosed in the '887 patent, which they are not, this is not the same as a disclosure that an element disclosed by the '887 patent determines whether a result of detection by a detecting means indicates internal access via data lines or external access from an external apparatus via the antenna, as recited in Claim 1. The claims require that when there is detection of an access, it is determined whether the detection indicates an internal access or external access. No unit in the '887 patent makes the determination as to whether a particular access is internal or external. All access disclosed by the '887 patent is external access, since all accesses are based on a change of electromagnetic field strength detected by the '887 antenna. The '887 patent does not, and cannot, disclose an internal access, as defined in Claim 1, since the '887 patent only discloses an IC card, and does not disclose the possibility of an access via data lines from an element external to the IC card.

For the reasons stated above, Applicant respectfully submits that amended Claim 1 (and all similarly rejected dependent claims) patentably defines over the '887 patent.

Independent Claim 9 is directed to an information processing method performed by an information processing apparatus having embedded therein a non-contact type IC, the method including a determining step for determining, by a signal judging unit of the information processing apparatus that is external to the non-contact type IC, whether the result of detection by processing of the detecting step indicates internal access or external access. Claim 10 recites a similar step. Claims 9 and 10 have been amended in a manner analogous to Claim 1. Further, Claims 12, 17, and 18 recite informing means for, when the determining means determines that the result of detection by the detecting means indicates the external access from the external apparatus via the antenna, notifying a user of the external access. Further, Claim 12 recites means for enabling the internal access to the non-contact IC by the communicating unit of the information processing apparatus via the data lines when the determining means determines that the result of detection by the detecting means indicates internal access by the communicating unit. Claims 17 and 18 recite similar limitations. Applicant respectfully submits that '887 patent fails to disclose any informing means, as recited in Claim 12. In this regard, the Office Action merely states that "once the circuit completes operation based on the access from the external device, an operation inhibition signal is generated to notify the system that a recent access has occurred." However, Applicant respectfully submits that a user be notified. For the reasons stated above, Applicant respectfully submits that the rejections of Claims 9, 10, 12, 17, and 18 are rendered moot by the present amendment to those independent claims.

Regarding the rejection of dependent Claims 2, 3, 6, 7, and 13-15 under 35 U.S.C. § 103, Applicant respectfully submits that the '852 application and the '845 patent fail to remedy the deficiencies of the '887 patent, as discussed above. Accordingly, Applicant

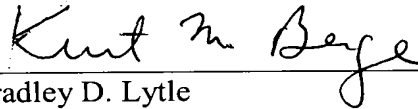
respectfully submits that the rejection of the above-noted dependent claims is rendered moot by the present amendment to Claims 1 and 12.

Thus, it is respectfully submitted that independent Claims 1, 9, 10, 12, 17, and 18 (and all associated dependent claims) patentably define over any proper combination of the '887 patent, the '852 application, and the '845 patent.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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